

WHAT IS FOOD INFLAMMATION AND HOW TO TEST FOR IT?

Eggs, salmon, lettuce, asparagus. All healthy foods, they also can be a cause of inflammation. How can this be? And could you have food inflammation to even the healthiest of foods? It's a big topic in the functional medicine world today, and every day there is new research coming out about it.

As a functional medicine practitioner, I run food inflammation tests on just about every client of mine and have discovered some surprising things throughout the years.

First things first, let's talk about what food inflammation really is.

What is Food Inflammation?

Most people understand what a food allergy is, but food inflammation is a much newer concept that many are just starting to hear about. Let's first look at what happens when someone has an allergy to peanuts, as an example. If allergic, immediately upon eating a peanut, someone can experience an anaphylactic reaction, such as swelling of the throat or tongue and even shortness of breath or vomiting. This is because the antibody produced by your immune system called Immunoglobulin E, or IgE, is detecting a food that doesn't work for that person and causes a serious and quick response.

Food inflammation, on the other hand, doesn't create such an immediate or noticeable response. Oftentimes, reactions take from one to seven days to show up. That's because food inflammation is mediated by a different Immunoglobulin called IgG, which causes



a delayed response. Another term called food sensitivities is also mediated by IgG, however they are often prone to false positives as they are measured in a different way, as we explain in the following section.

In our experience running these tests in our practice, not only do common inflammatory foods like dairy and wheat often show up on a food inflammation test (or FIT), but foods we consider very healthy can also create inflammation. This can result in fatigue, aches, stomach pains, reflux and even rashes. But it's extremely difficult to detect which foods are causing these reactions without running a food inflammation test because the response can be far removed from when a food was consumed.

The Most Effective Way to Test for Food Inflammation

Here at Pioneer Health Center, we run the most advanced food inflammation test that we know of. After years of research on the subject, and evaluating different methods of measuring food inflammation, we selected the one we believe gives the most accurate recording. The scientists who created this lab-administered blood test determined a very specific way to detect if the response to a food antigen was truly inflammatory or not, a process which greatly reduces the presence of false positives.

When there is a true food inflammation response in the body, not only will the IgG complex be present, but a complement protein will also bind to this complex, confirming the inflammatory response. So, by detecting when the complement protein binds to the IgG antibody, we can verify food inflammation. Other tests, such as food sensitivity tests, just look for IgG to be present, but this doesn't tell the entire story and may not be indicative of a true food inflammation response. IgG antibodies can show up for a number of reasons, but not always because there is an inflammatory response to a food. In this way, food inflammation can be a much more precise way of identifying immune reactions to food.

What's more is this detection capability works not just on food proteins, but food additives as well. This means we can detect if a person is reacting to food colorings or flavorings, which are present in a large majority of foods today. This allows us to get hyper-specific about a patient's dietary needs once we know what their body can't tolerate and what it can.

How Food Inflammation Occurs

If you think about it, our digestive tracts interact on a regular basis with our outside environment. Everything we are exposed to physically, so too is our digestive tract. Did you know that the cellular structure that lines this pathway and separates the outside world from our inside world is only one cell thick?

Picture this: There is a row of bricks lined up one-by-one. Holding them together is the mortar, which seals up the gaps between the bricks. If the line of bricks is hit by something, it

can begin to rupture, letting unwanted things in. This is exactly what happens in our digestive tracts when we are exposed to toxins from our environment, and can lead to a condition called “leaky gut”. With leaky gut, the area between those bricks (or our cells) begins to widen and allows antigens and undigested proteins to get past the barrier and inside our bodies. Just past this barrier (which, remember, is only one cell thick) are most of our immune cells. These cells are here to defend against potential invaders like chemicals and food antigens.

Essentially any substance that passes through this barrier that the immune cells don't recognize as normal (even the healthiest of foods), it views as an invader and launches an immune (IgG) response against it to try and remove it from the body. As a result, food inflammation occurs (and is confirmed only when the complement protein is present as well). Inflammation is our body's primary immune response. If you think about what happens when you sprain your ankle, it gets inflamed. The same happens when our immune cells interact with a “foreign” substance.

It's important to note that this process can happen with any kind of food, healthy or not. If the digestive tract is damaged from triggers like pollution, processed foods, or medication (more on that below), and a person eats a food regularly enough, chances are high it's going to come in contact with this compromised barrier, passing through the threshold and meeting the immune system. Most often when we run food inflammation tests, we see clients come up positive for healthy foods they eat every day. But who would have thought that healthy foods could participate in creating inflammation and degenerative conditions like autoimmunity and mental disorders in people?

What Causes Food Inflammation

The occurrence of food inflammation is rising at an alarming rate because of the decline in quality of our environment and our body's attempt to compensate and react to it. In our experience, food inflammation is most often triggered by the environment that we're exposing ourselves and our digestive tracts to. If exposure is prolonged, it can lead to dysbiosis, or an alteration or manipulation of bacteria in our digestive tracts — and not in a good way.

Here are the main contributors to gut dysbiosis and food inflammation:

Antibiotics - One of the biggest culprits of food inflammation that we see today is antibiotics. This isn't referring only to the ones we take orally, but antibiotics that the food animals we eat are given, too. Most antibiotics produced in this country today are in fact for animals, not humans, so in theory, a person could never take an antibiotic pill yet still get exposure to it through food, which can potentially lead to damage in the gut, and eventually, food inflammation.

Pesticides and Herbicides - Pesticides and herbicides are two other major contributors to dysbiosis, and as a result, food inflammation. Unless someone has eaten food only from a trusted organic source their entire life, they have had exposure to these toxic but common chemicals. And that can have an enormous effect on the microbiome.

Lack of Nutrient-Dense Foods - The quality of food today is vastly different from what it was just a decade or two ago. Declining soil and air quality, coupled with the use of pesticides, herbicides, and other toxic chemicals, has altered the structure and nutrient density of foods ranging from potatoes to kale to blueberries. Without enough nutrients in our bodies to keep our cells strong and able to defend against pathogens and foreign substances, we can succumb to infections, oxidative stress, and damage to the digestive tract.

Food Alteration - It is estimated that up to 75 percent of the world's population has a dairy sensitivity today. In our research and clinical experience, this is most often due to the process of pasteurization where dairy molecules experience an actual change in chemical structure. A similar process has happened with wheat. Most wheat today is also highly modified, so much so that it doesn't even look like the wheat produced 50 years ago. When a food is changed to this extent, our bodies no longer recognize it, and our immune systems view it as a foreign entity that doesn't belong in the body.

Because of these common triggers, we have yet to come across a food inflammation test that comes up completely negative...

Why Everyone Should Run a Food Inflammation Test

As I touched on earlier, food inflammation doesn't always create a symptomatic response, or at least not immediately. At Pioneer Health Center, we have been running this food inflammation test on both symptomatic and otherwise healthy individuals and there hasn't been a single person we've run this test on that hasn't had foods that show up that are creating inflammation. Because of the environment our digestive tracts are exposed to, everybody has some level of food inflammation, but it's impossible to pinpoint to what unless a food inflammation test is conducted.

By removing these foods from the body for a period of time, we remove the inflammatory burden on the body and improve the health situation of the patient overall. Symptomatic patients absolutely feel better, and those who weren't symptomatic also notice an improvement in their overall wellbeing, perhaps in ways they didn't even realize were suboptimal.

What Happens When Food Inflammation Go Undetected?

Food inflammation can lead to some serious degenerative conditions ranging from autoimmune diseases to chronic pain and even accelerated aging. If food inflammation is left

unaddressed, a patient may experience increased inflammation overtime, and eventually, the scale may tip and a major health condition can ensue. In our clinical experience, just about every condition in the body is made worse when inflammation is elevated, so in that lens, it's crucial to identify and remove these during any kind of healing process.

In effect, addressing food inflammation opens the door for every single person to improve their health.

New and existing patients of Pioneer Health Center can run our food inflammation test in any of our programs. We'd love to talk to you to discuss how pinpointing food inflammation can help to address chronic or unexplained health issues and how we can help you address them all in one of our many programs.
